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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,294	09/13/2005	Juha Maijala	ТАМРРАТ-14	. 1070
	8 7590 07/19/2007 . ENNON & STIENNON		EXAMINER	
612 W. MAIN ST., SUITE 201			PARKER, FREDERICK JOHN	
P.O. BOX 1667 MADISON, W			ART UNIT	PAPER NUMBER
•		1762		
· ·				
			MAIL DATE	DELIVERY MODE
	•		07/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/534,294	MAIJALA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Frederick J. Parker	1762				
The MAILING DATE of this communication apperiod for Reply	pears on the cover sheet w	ith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI 136(a). In no event, however, may a will apply and will expire SIX (6) MOI e, cause the application to become A	CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
	s action is non-final.					
3) Since this application is in condition for allowed		ters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>7-17</u> is/are pending in the application	1.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>7-17</u> is/are rejected.						
7) Claim(s) is/are objected to.	,					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ⊠ All b) ☐ Some * c) ☐ None of:						
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the price	ority documents have beer	received in this National Stage				
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(c)						
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper Not	(s)/Mail Date				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5-9-05. 5) Notice of Informal Patent Application 6) Other:						

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

2. Claim 7 is objected to because of the following informalities: claim 7, line 3, "power" is a typo; line 17, "in the a " is a typo. Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 5. Claims 7-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al EP 982 120. All citations are examples; there would be additional support throughout the reference.

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Arai et al teaches a method for coating paper webs which may include fibers[0022] comprising the steps of forming a coating powder made up of an appropriately proportioned mixture of an inorganic fine particle component and an organic powder binder component which is applied by electrostatic means [0080] (see figure 3 and accompanying texts) onto the web 32 by a negatively charged applicator (necessarily comprising an electrode) 38, with oppositely charged electrode 36 beneath the web. The powdery coating on the web is transported to dual nip fixing rollers 35 where the coating is heated and fixed ("finishing") to the web substrate [0081-82] (see also figure 3 and accompanying text). Since the heating/ fixing involves melting [0082,93, etc], as does Applicants process (see Specification [0007]), the reference meets the limitation of a temperature above a selected glass transition temperature.

The reference does not cite the same semantics and wording used by applicants: G',G'', loss factor, rubbery state plateau, etc. It does have to because the processes of the reference and as claimed, when read in view of the specification, are essentially the same. Applicants teach that polymer materials used may be styrene-butadiene or acrylate copolymers. So does Arai et al, see [0028]. As established above, both require at least some melting during the heating/ fixing step. Simply because Applicants have chosen to describe the process differently/ more technically than Arai does not impart patentability to the process, particularly given the fact the processes appear otherwise the same. It would have been apparent that fixing / heating temperatures would have been dependant upon the thermal properties of the polymer/s being used in the coating. Clearly, one skilled in the art would not have selected an arbitrary temperature or a single temperature for all coating compositions. The same argument is made for linear load, dwell time, etc which would have been determined by routine experimentation because such parameters

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dictate the amount of time the coating sees the elevated temperature at rollers 35 and therefore the degree of fixing/ melting as required by Arai. Where general conditions of a claim are disclosed in the prior art, it is not inventive to discover optimum or workable ranges by routine experimentation, In re Aller 105 USPQ 233. Reaction conditions do not patentably distinguish over the prior art where they constitute merely modifications of an old process which one skilled in the art would be capable of making, In re Budde 138 USPQ 71. Critical thermal properties are available in standard texts, the internet, etc. Thus Applicants specific loss factors and moduli of claims 8-12,14-17 are deemed to be simply matters of variation due to different coating materials which are not cited by the reference but would have been present because they represent inherent materials properties. When a reference discloses the limitations of a claim except for a property/ies, and the Examiner cannot determine if the reference inherently possesses those properties noted above, the burden is shifted to Applicant/s, In re Fitzgerald 205 USPQ 594 and MPEP 2112.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to carry out the method of Arai et al and determining specific process variables dependant on the coating materials used in order to optimize the end-use product in providing the organic-inorganic coated sheet cited by Arai et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Primary Examiner Art Unit 1762